

251 MISSOURI BRIDGES PROJECT

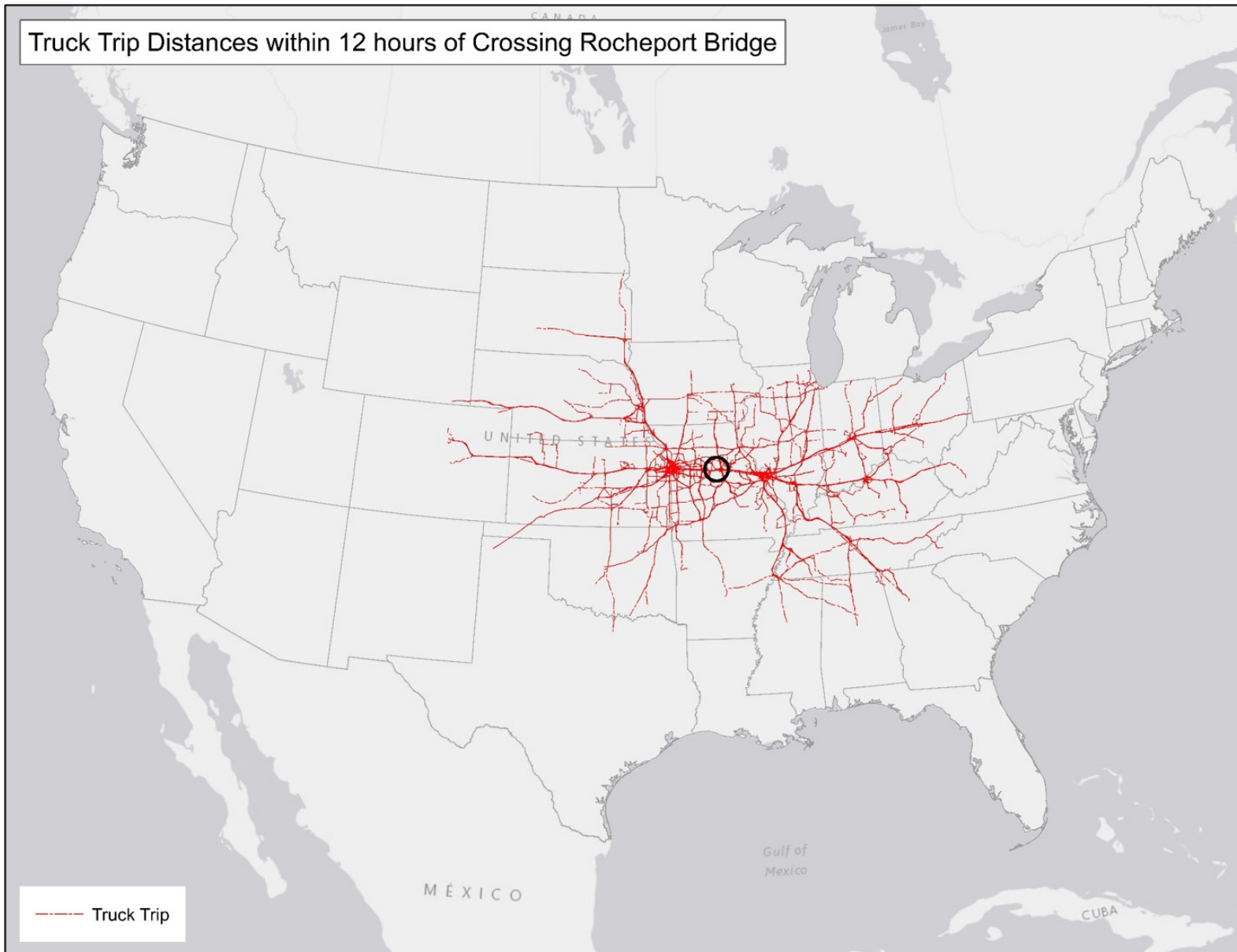
Modernizing Missouri's Rural Global Supply Chain Infrastructure

Appendix D:

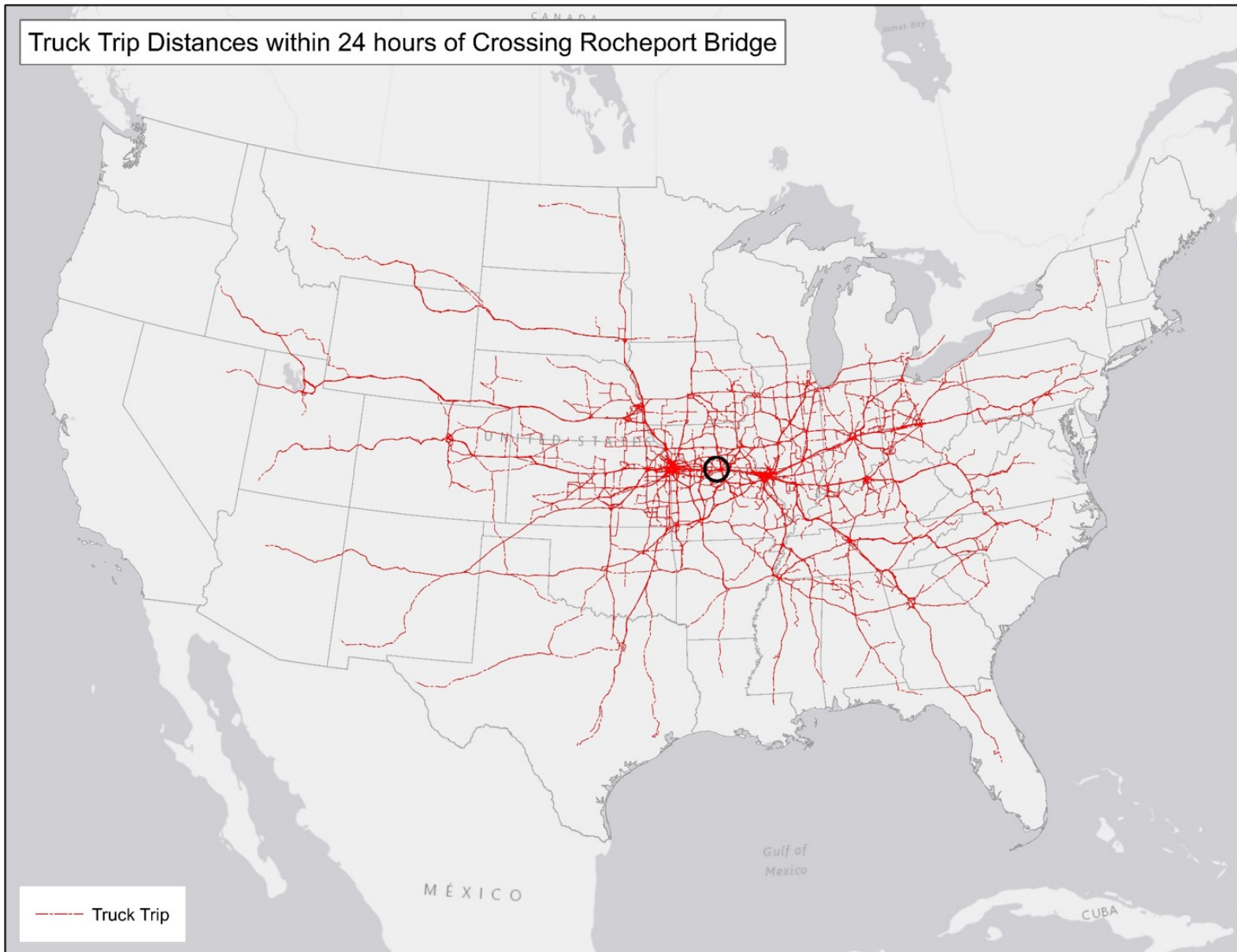
Maps, Design Plans, and Photos



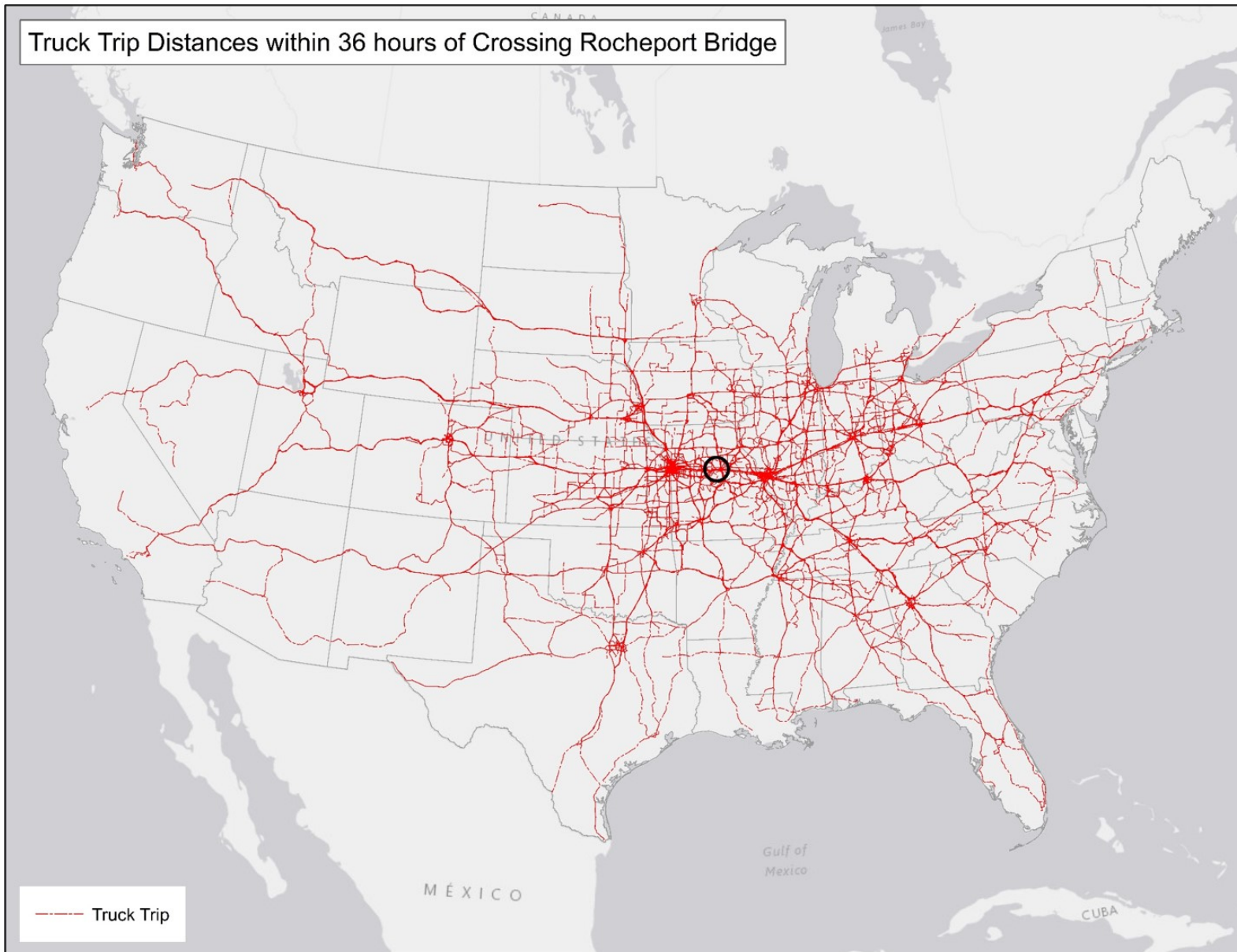
Truck Trip Distances within 12 hours of Crossing Rocheport Bridge



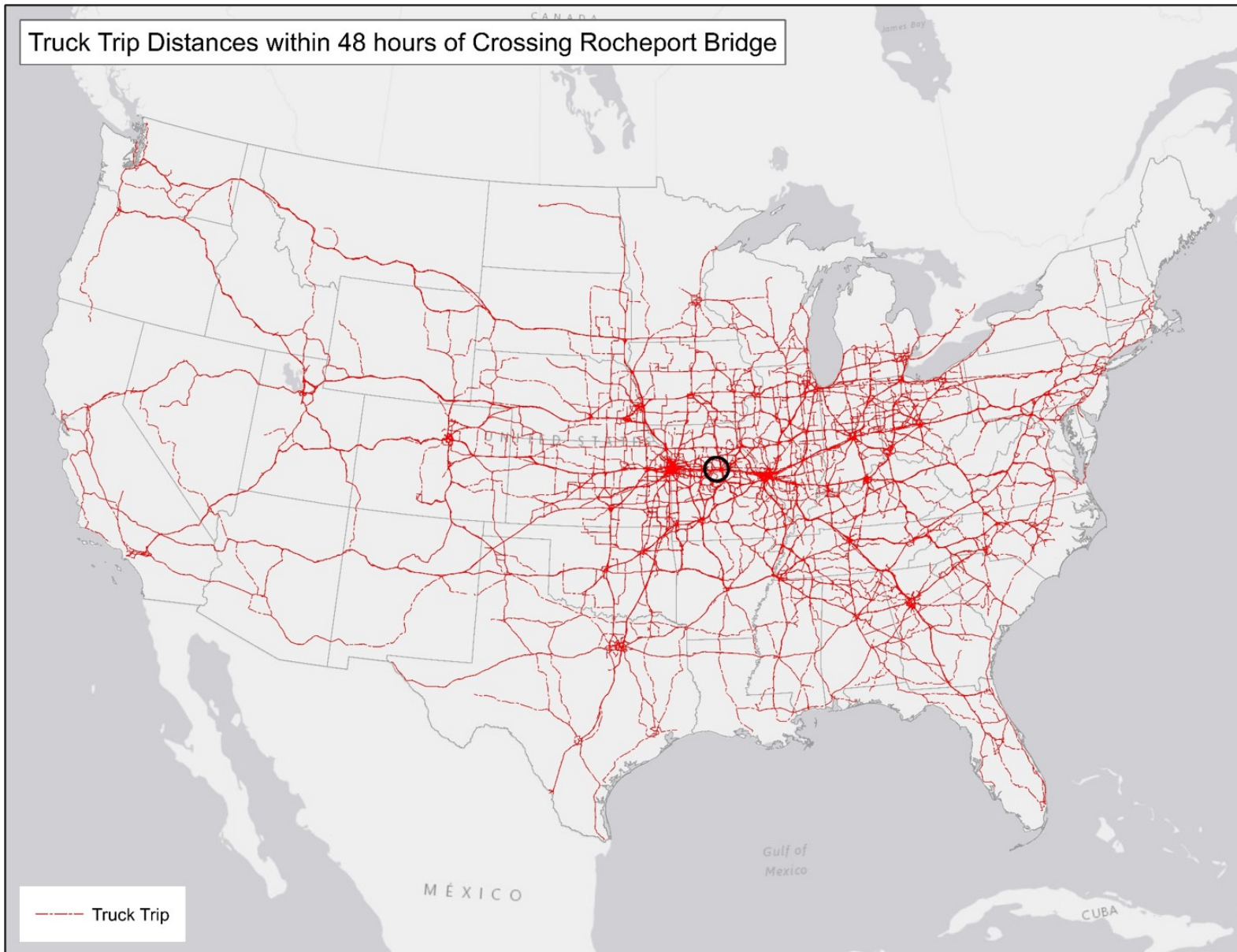
Truck Trip Distances within 24 hours of Crossing Rocheport Bridge



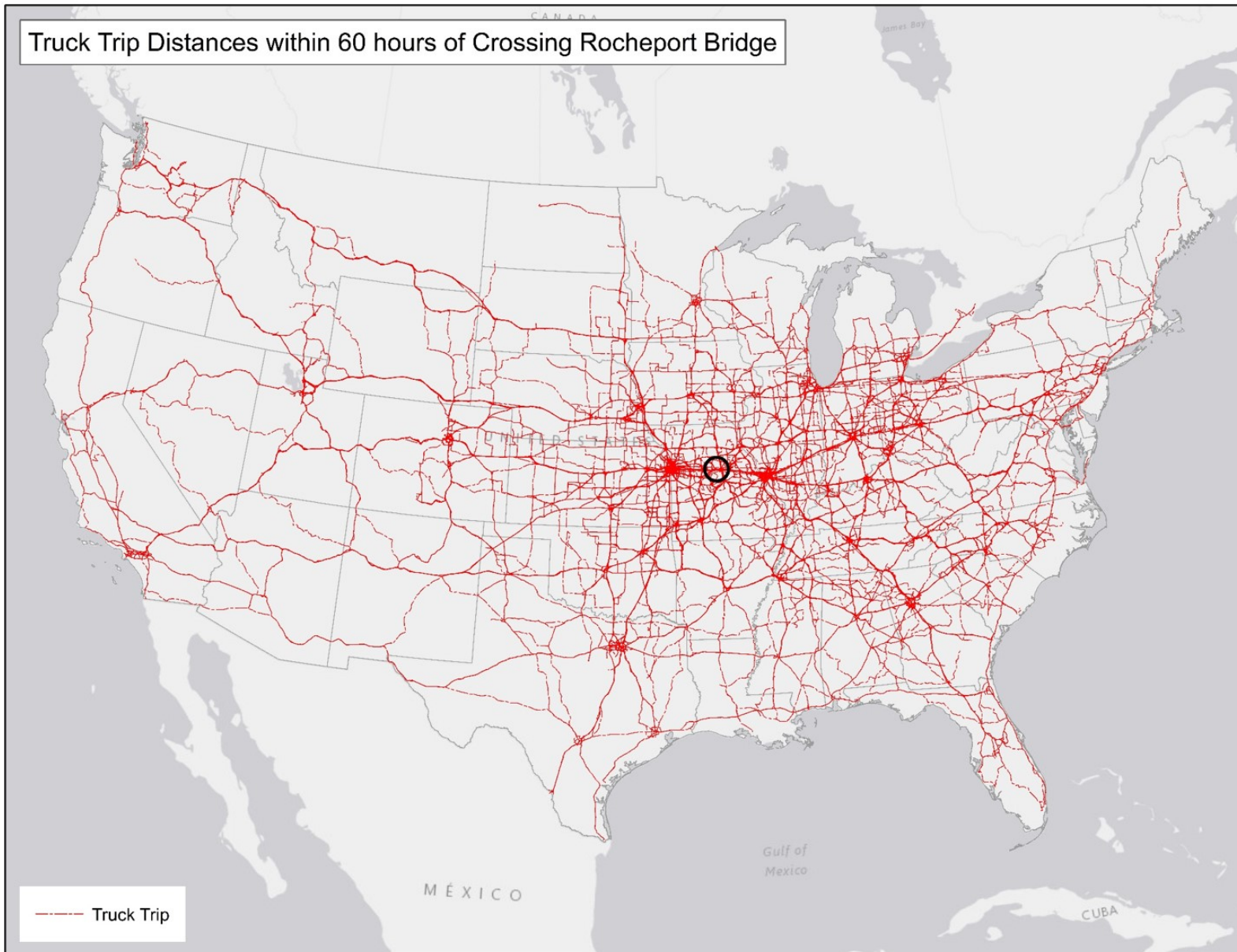
Truck Trip Distances within 36 hours of Crossing Rocheport Bridge



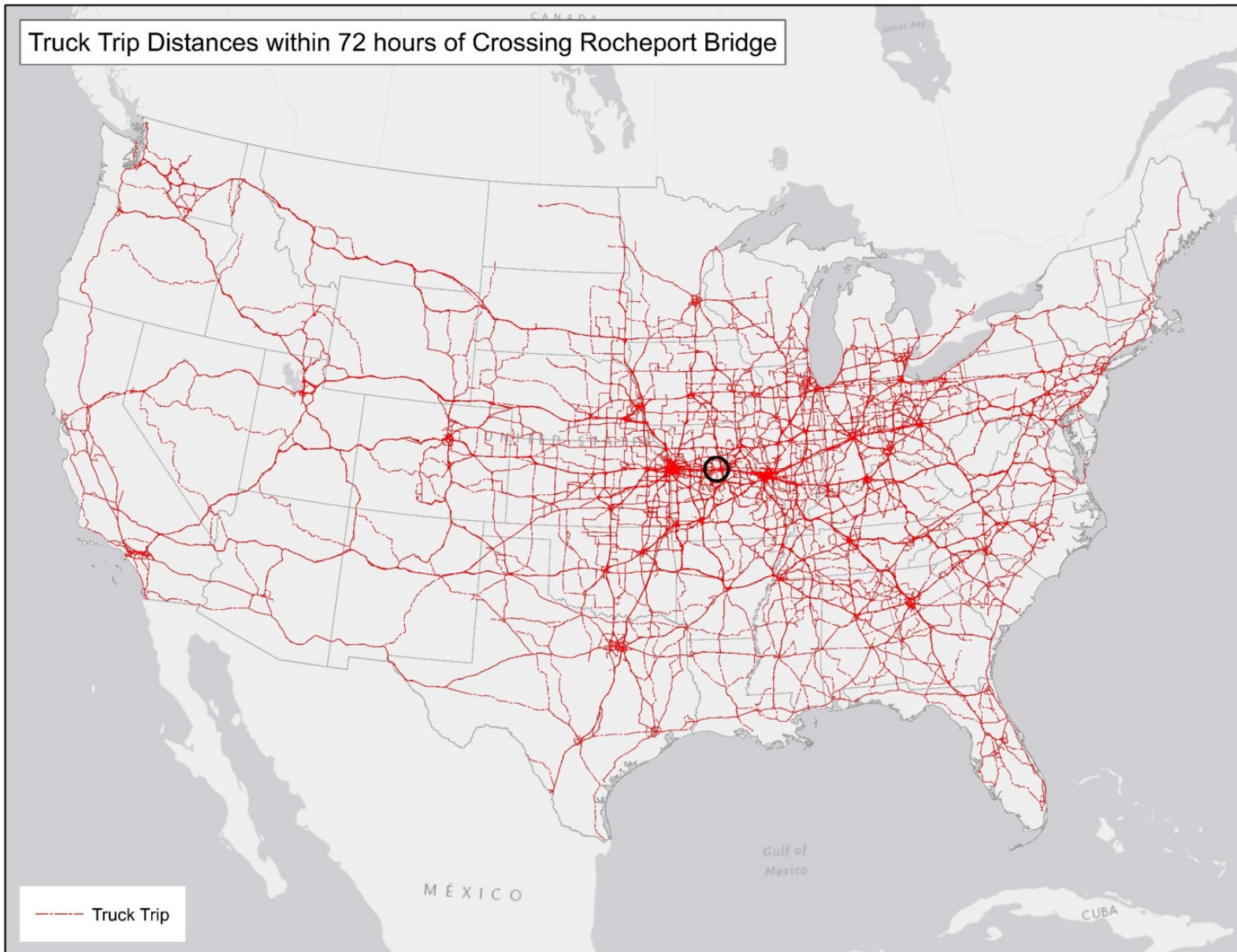
Truck Trip Distances within 48 hours of Crossing Rocheport Bridge



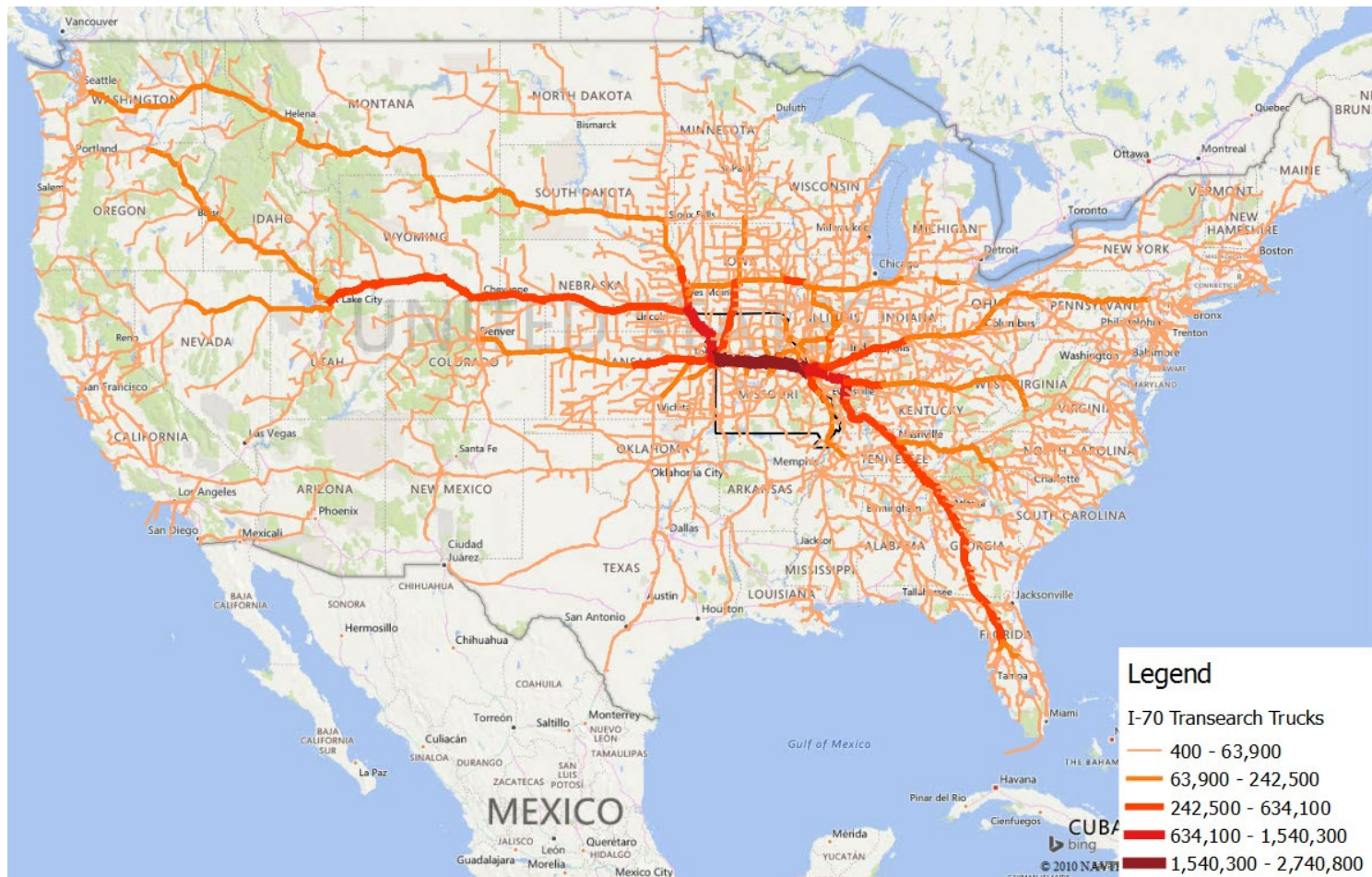
Truck Trip Distances within 60 hours of Crossing Rocheport Bridge



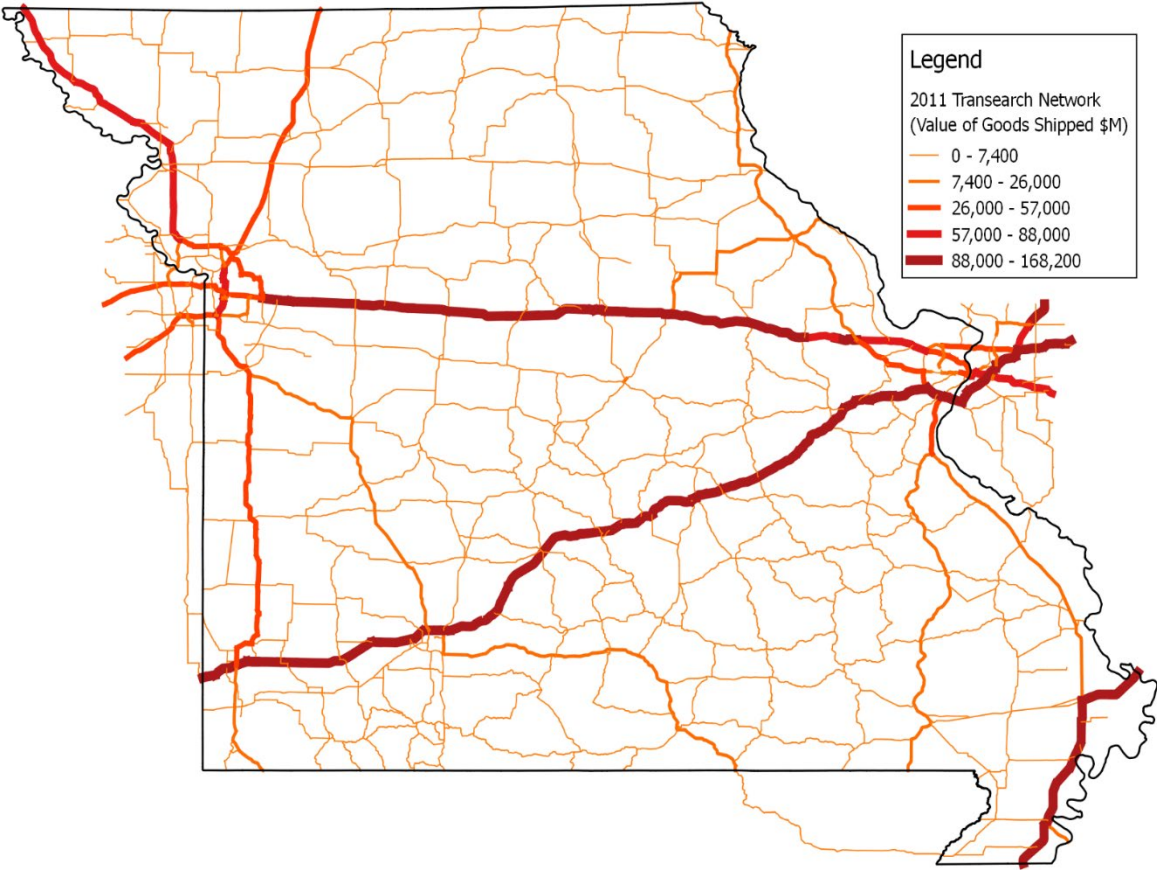
Truck Trip Distances within 72 hours of Crossing Rocheport Bridge



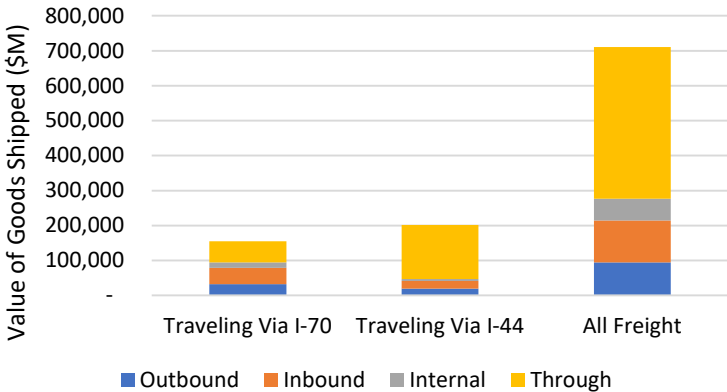
I-70 Trade Map (By Share of I-70 Volume, 2011 Transearch)



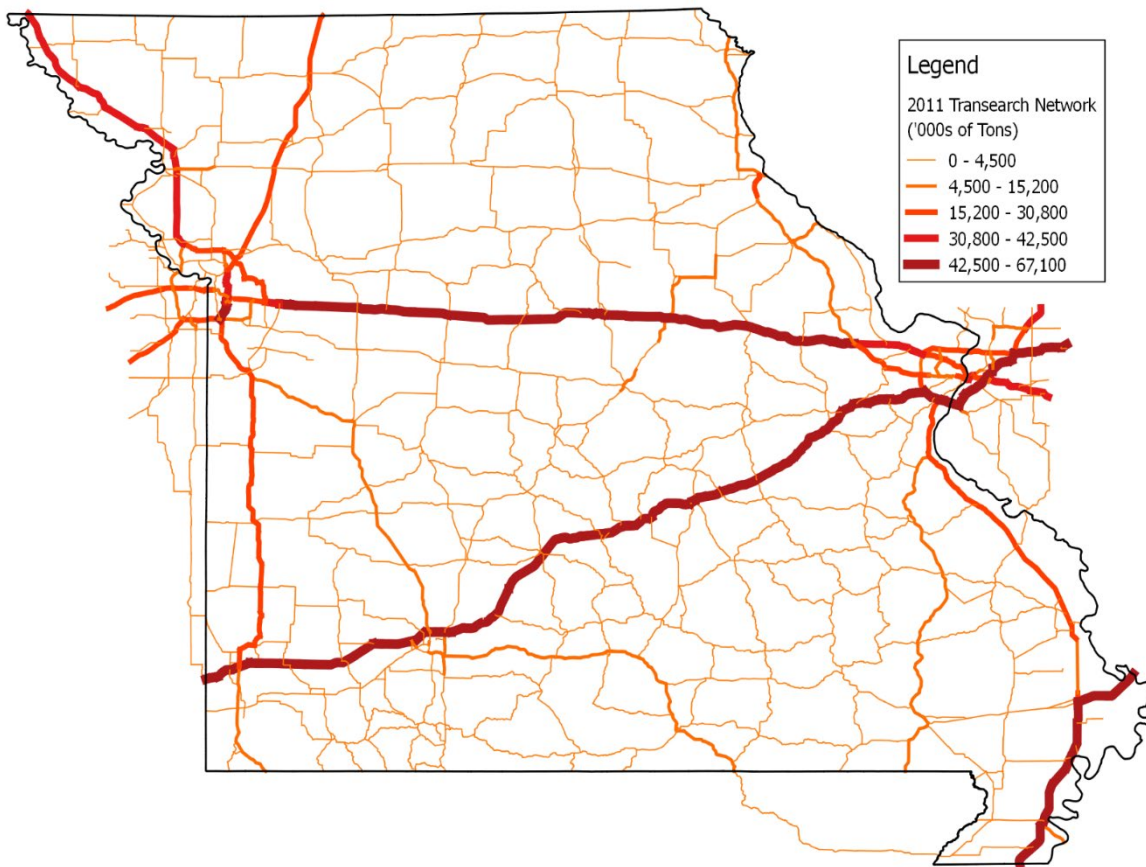
2011 Transearch Value of Goods Shipped



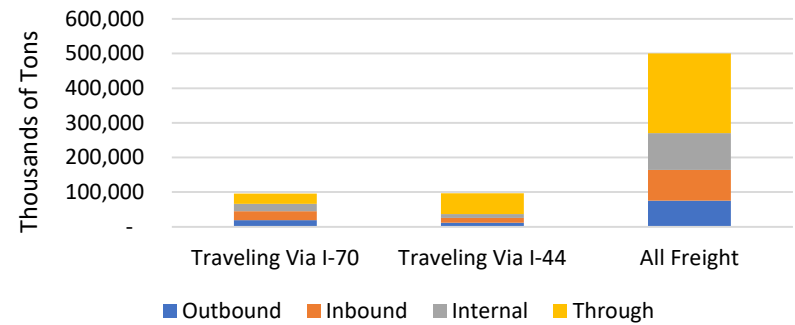
Relative Activity of Major Corridors in Missouri (2011)



2011 Transearch Volumes of Goods Shipped



Relative Activity of Major Corridors in Missouri (2011, Thousands of Tons)





Pictures of Rocheport Bridge's condition, illustrating need for replacement.
Source: MoDOT



L0962 Cooper 70 E 8/24/15
Bent 4 span 5 east side
view with map cracking
throughout and spalls
with rebar exposed



L0962 Cooper 70 9/10/15
Span 13 stringer 9 at L8
with hvy pack rust
cantilever bearing

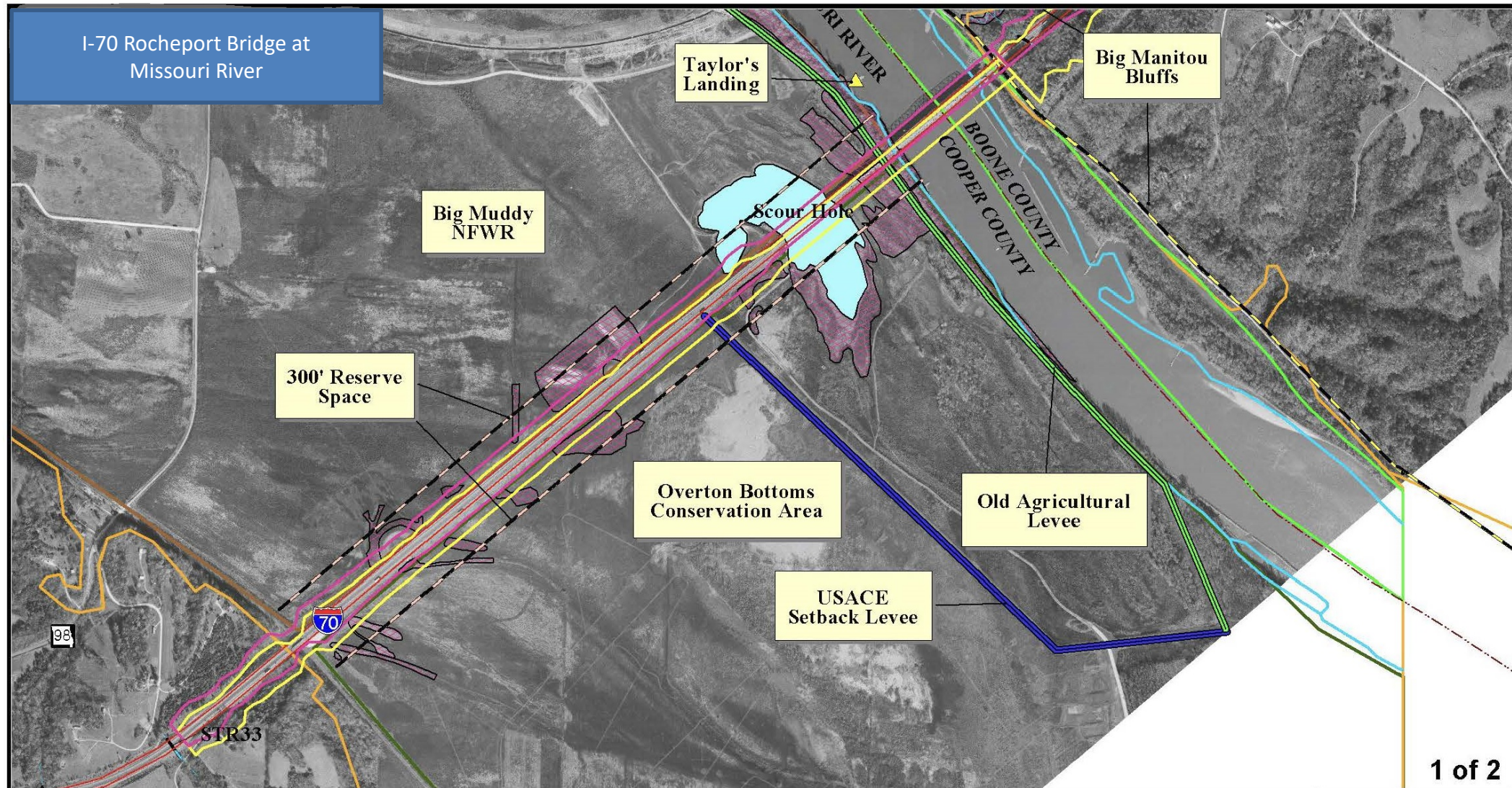


L0962 Cooper 70 8/28/17 Bent 4
west side capface all delaminated and
spalled out with rebar exposed

Pictures of Rocheport Bridge's condition, illustrating need for replacement.

Source: MoDOT

I-70 Rocheport Bridge at Missouri River



1 of 2



SECTION 3
Boonville to Rocheport

LEGEND

North Alternative	Katy Trail	FEMA Floodway	Overton Bottoms Conservation Area
South Alternative	300' Reserve Space	Floodplain	Wetland
I-70 Center Line	River/Stream	Big Muddy NRWR	Sinkhole
Stream Crossing	County Line	USACE Setback Levee	Spring
	Old Agricultural Levee		

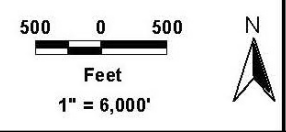


Figure II-2
Missouri River Crossing Alternatives Cooper & Boone Counties, Missouri

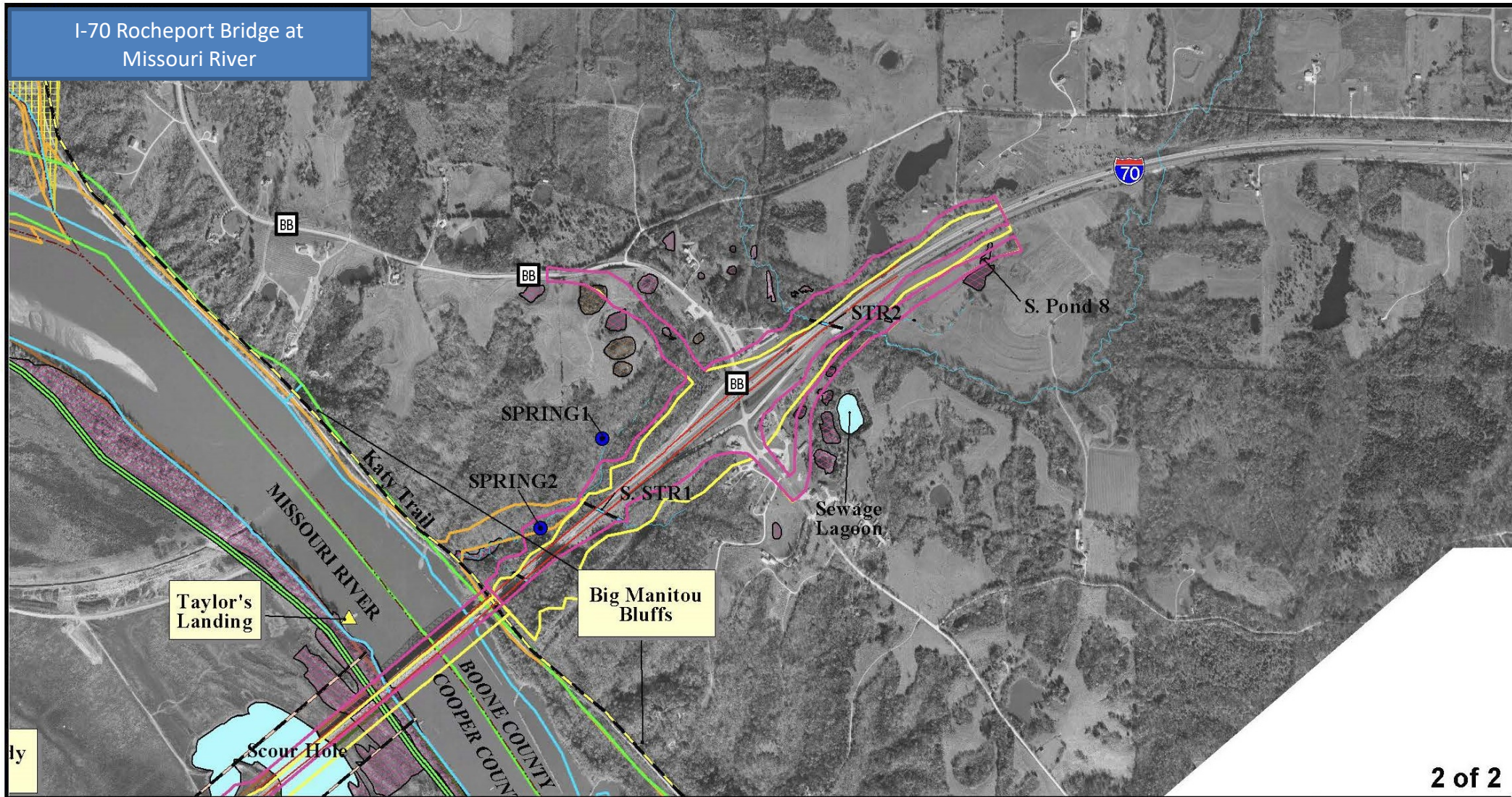
Conceptual design plan for the I-70 Missouri River Bridge at Rocheport.

After a thorough analysis and evaluation (including NEPA), the new 3,000-foot bridge will be constructed adjacent to the existing bridge. See next page for eastern segment.



Source: I-70 Second Tier Environmental Assessment

I-70 Rocheport Bridge at Missouri River



2 of 2

		<p>SECTION 3 Boonville to Rocheport</p>	<p>LEGEND</p>					
			<ul style="list-style-type: none"> — North Alternative — South Alternative — I-70 Center Line — Stream Crossing 	<ul style="list-style-type: none"> Katy Trail 300' Reserve Space River/Stream County Line Old Agricultural Levee USACE Setback Levee 	<ul style="list-style-type: none"> FEMA Floodway Floodplain Big Muddy NRWR 	<ul style="list-style-type: none"> Overton Bottoms Conservation Area Wetland Sinkhole ● Spring 		

Figure II-2
Missouri River
Crossing Alternates
Cooper & Boone
Counties, Missouri

Conceptual design plan for the I-70 Missouri River Bridge at Rocheport.

After a thorough analysis and evaluation (including NEPA), the new 3,000-foot bridge will be constructed adjacent to the existing bridge.

Source: I-70 Second Tier Environmental Assessment



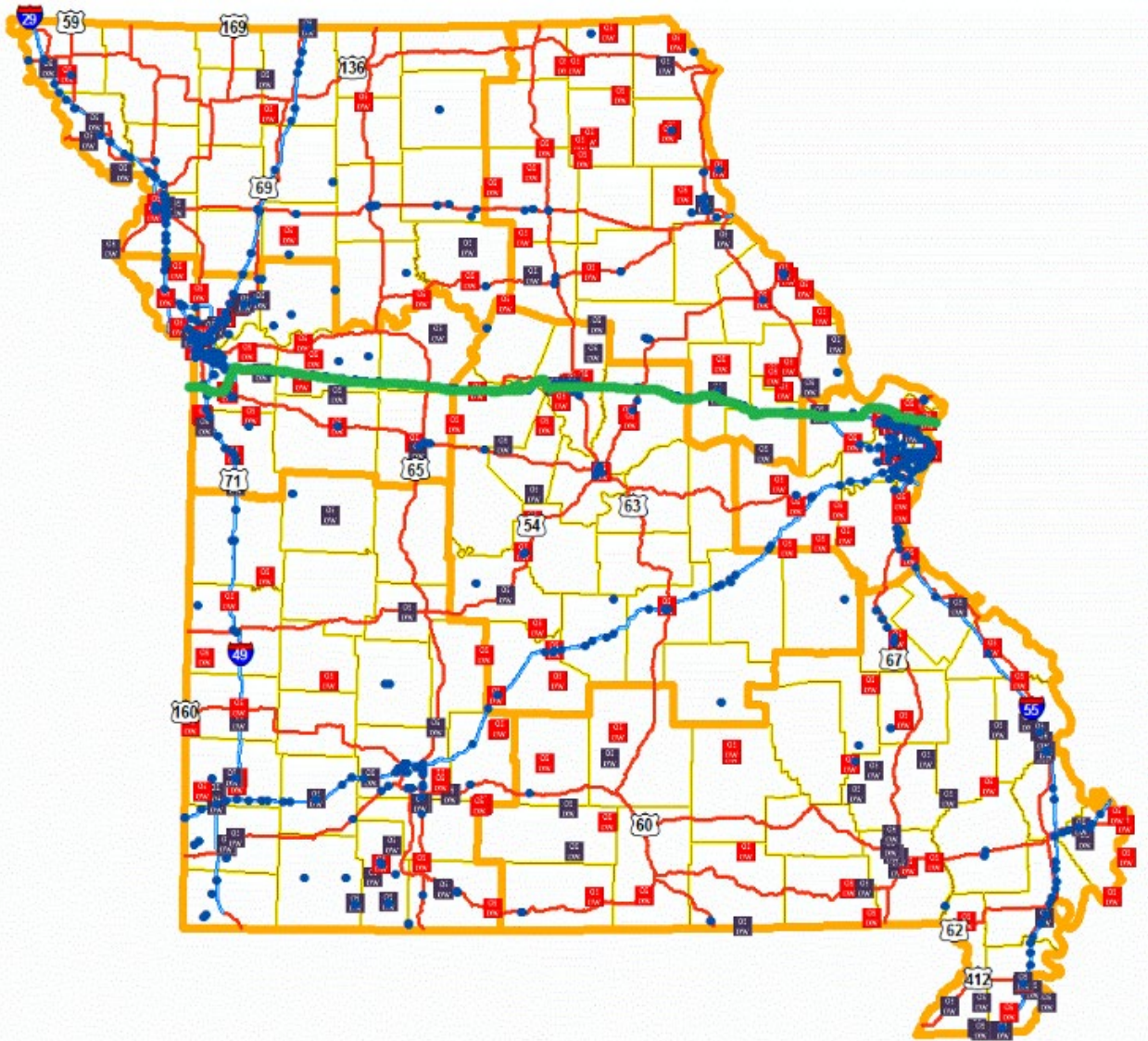
Real-Life Example



Routine Oversize Overweight Permit *(Not a Superload)*

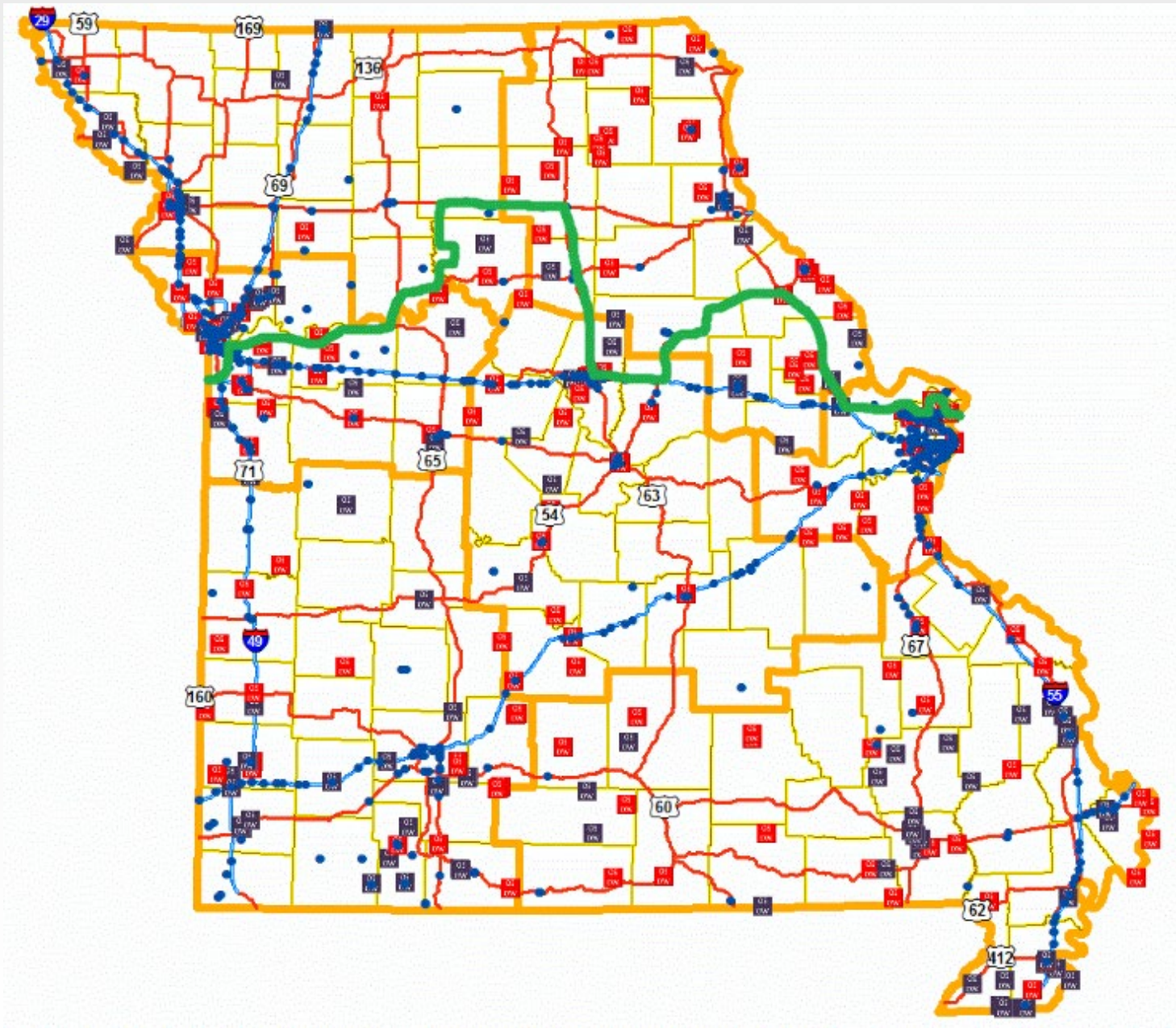
Entering from IL at I-270/Exiting into KS at I-435

Preferred Route



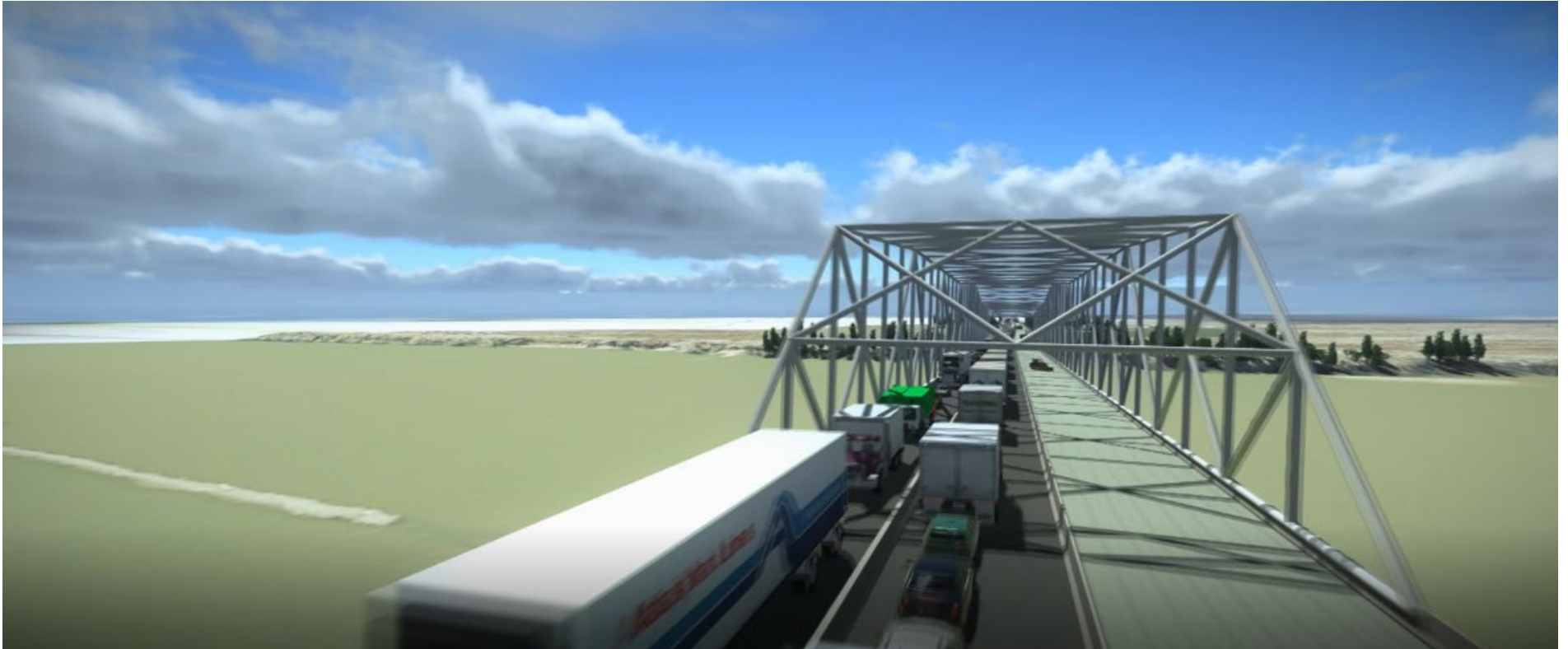
271 Miles Total

Actual Route



413 Miles Total

**52%
Increase!**



Simulation of Rocheport Bridge rehabilitation (if INFRA funding is not awarded for new construction). Traffic would be diverted to one side of the bridge to enable complete rehabilitation on the opposite side. Traffic models predicts the rehabilitation will close lanes for seven to nine months with three- to eight-hour backups depending on the extent and number of incidents on any given day.

Video Link to simulation: <https://blaisassoc.egnyte.com/dl/775rQq8M47>

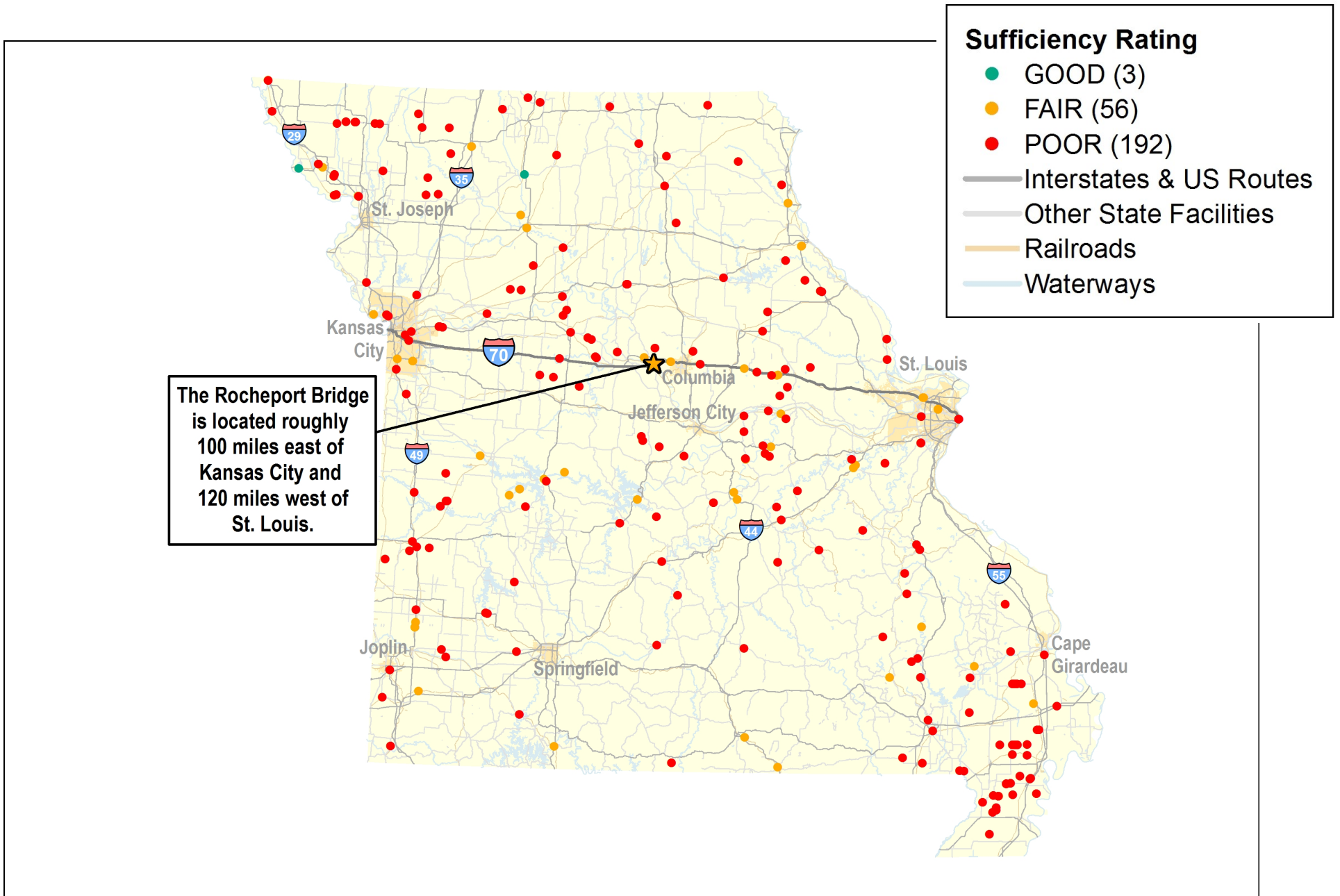




Traffic on I-70 in Boone County – near the proposed Rocheport Bridge new construction.

Photo source: MoDOT D5562-CM-R2-111





Location of the 251 bridges and their sufficiency ratings. Over 76 percent of the bridges are in poor condition.

Source: HDR

S0922 Nodaway 46 3/31/15
Profile from southwest



Bridge deterioration of rural bridge included in Missouri 250 Bridge Plan

Source: MoDOT.



S0634 Phelps B 9/5/17
West side deterioration



Example of deterioration on a rural bridge included in the 251 Missouri Bridges Project.

Source: MoDOT



A1293 N Andrew 29 N 12/5/16
Deck with many patches



Example of deterioration on a rural bridge included in the 251 Missouri Bridges Project.

Source: MoDOT





Rte. AD @ Happy Sac Creek
5 min from St. Clair, MO

02/06/2019

Example of deterioration on a rural bridge included in the 251 Missouri Bridges Project.

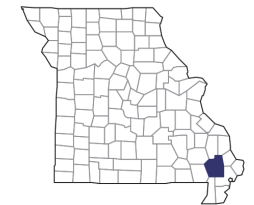
Source: MoDOT





This one lane bridge in Stoddard County was built in 1933. Notice the bridge is two-lanes but has been striped for one lane due to weight restrictions. The proposed treatment is replacement. Stoddard County is located in southeast Missouri where the economy is specialized in agriculture, which employs 3.8 times more people than what would be expected in a location of this size. Household income in Stoddard County is \$38,096.

Lat: 37 2 18.09, -89 46 19.81





Iron County bridge built in 1928. Mining, quarrying, oil, gas extraction, and agriculture are the primary economic drivers in Iron County, MO. This 2-lane rural bridge is a representative example of the many 251 bridges proposed for rehabilitation or reconstruction. This particular bridge is located on a rural minor arterial and the proposed treatment is reconstruction. Should the bridge become un-operable, the detour length is 48 miles.



Lat: 37 35 6.29, -90 35 3.56



This two-lane bridge is located in Boone County near Interstate 70. It was constructed in 1961 and has been given a “serious condition” rating for deck condition.

Lat: 39 2 10.46, -92 14 24.82



Public Participation

Residents participate in public comment forums and provide written feedback during multiple open houses on how to improve I-70. Photos from MoDOT documents.

